



Medical Necessity Guidelines:

Comprehensive Genomic Profiling with FoundationOne® CDx or FoundationOne® Liquid CDx to Guide Cancer Treatment in Patients with Advanced Cancer

Effective: January 1, 2025

Prior Authorization Required	
If <u>REQUIRED</u> , submit supporting clinical documentation pertinent to service request to the FAX numbers below	Yes ⊠ No □
Notification Required	Yes □ No ⊠
IF <u>REQUIRED</u> , concurrent review may apply	res 🗆 No 🖂
Applies to:	
Commercial Products	
 ☑ Harvard Pilgrim Health Care Commercial products; 800-232-0816 ☑ Tufts Health Plan Commercial products; 617-972-9409 	
CareLink SM – Refer to CareLink Procedures, Services and Items Requiring Prior Authorization	
OdioEliik Noici to OdioEliik i Toocdares, Ocivioes and tems requiring i noi Admonzation	
Public Plans Products	
☑ Tufts Health Direct – A Massachusetts Qualified Health Plan (QHP) (a commercial product); 888-41	5-9055
☑ Tufts Health Together – MassHealth MCO Plan and Accountable Care Partnership Plans; 888-415-	9055
☑ Tufts Health RITogether – A Rhode Island Medicaid Plan; 857-304-6404	
☐ Tufts Health One Care A dual-eligible product; 857-304-6304	
Senior Products	
☐ Harvard Pilgrim Health Care Stride Medicare Advantage; 866-874-0857	
☐ Tufts Health Plan Senior Care Options (SCO), (a dual-eligible product); 617-673-0965	
☐ Tufts Medicare Preferred HMO, (a Medicare Advantage product); 617-673-0965	
☐ Tufts Medicare Preferred PPO, (a Medicare Advantage product); 617-673-0965	

Note: While you may not be the provider responsible for obtaining prior authorization or notifying Point32Health, as a condition of payment you will need to ensure that any necessary prior authorization has been obtained and/or Point32Health has received proper notification. If notification is required, providers may additionally be required to provide updated clinical information to qualify for continued service.

Overview

Advances in the understanding of the molecular basis of cancer over the past two decades have led to the development of therapies approved to treat cancers harboring specific genomic biomarkers.¹⁻² As a result, precision oncology, the use of molecular biomarkers to aid in the diagnosis, prognosis or treatment of cancer, is now possible for multiple types of tumors.³ Additionally, improvements in next-generation sequencing (NGS), a technology that enables massively parallel DNA sequencing, have led to the development of multi-gene panels. Gene panels can include only the most critical, clinically relevant portions of genes or can be comprehensive, containing coding and non-coding regions of genes, and even gene fusion detection.⁴

Comprehensive Genomic Profiling (CGP) refers to NGS-based molecular assays that provide additional insight beyond individual gene hotspots; CGP assays can help characterize the underlying mechanisms of disease and may identify genomically matched treatment options such as a targeted therapy or immunotherapy. CGP typically involves sequencing of entire exonic regions of genes of interest (within a comprehensive gene panel or whole exome sequencing) and may also include selected intronic regions. CGP can detect multiple types of molecular alterations (i.e., single nucleotide variants

(SNVs), small and large insertion and deletion mutations (INDELs), copy number alterations (CNAs), structural variants (SVs) and splice-site variants) in a single assay, and may be used to calculate microsatellite instability (MSI) status and tumor mutational burden (TMB).⁴⁻⁵ In addition to guiding treatment selection, CGP may optimize clinical management by excluding the use of ineffective therapies,⁶⁻⁸ determining eligibility for clinical trials for genomically-matched and biomarker-driven therapies^{7,9} and by informing diagnosis and/or prognosis.¹⁰⁻¹³ Given the rapid evolution of the field of precision oncology, and the need to efficiently identify an optimal treatment plan, there is increasing support for an expanded, broad or comprehensive approach to molecular or genomic profiling for a growing number of advanced solid tumors.^{3, 14-21}

Although tissue-based testing is considered the gold-standard approach to molecular testing, tissue may not always be available or feasible to obtain. When comparing tissue and liquid biopsy, there are considerations that may factor into clinical decision-making such as: when the tissue specimen is exhausted from prior testing, patient preference to avoid (or contraindication for) a repeat invasive biopsy, patient progression on therapy, and lack of an available biopsy site to obtain an adequate sample for testing. A number of NCCN Guidelines recommend liquid biopsy (plasma) testing in certain clinical circumstances. 14-15, 18-20, 22-25 Because studies have shown substantial concordance between cell free DNA (cfDNA)-based testing and tumor testing, in patients without tissue-based genomic test results, treatment may be based on actionable alterations identified in cfDNA.3

FoundationOne®CDx is a qualitative next-generation sequencing based in vitro diagnostic test that uses targeted high throughput hybridization-based capture technology for detection of substitutions, insertion and deletion alterations (indels), and copy number alterations (CNAs) in 324 genes and select gene rearrangements, as well as genomic signatures including microsatellite instability (MSI) and tumor mutational burden (TMB) using DNA isolated from formalin-fixed, paraffinembedded (FFPE) tumor tissue specimens.²⁶

FoundationOne® Liquid CDx is a qualitative next generation sequencing based in vitro diagnostic test that uses targeted high throughput hybridization-based capture technology to detect and report substitutions, insertions and deletions (indels) in 311 genes, rearrangements in four (4) genes and copy number alterations in three (3) genes. FoundationOne Liquid CDx utilizes circulating cell-free DNA (cfDNA) isolated from plasma derived from anti-coagulated peripheral whole blood of cancer patients collected in FoundationOne Liquid CDx cfDNA blood collection tubes included in the FoundationOne Liquid CDx Blood Sample Collection Kit. ²⁷

NOTE: Genetic and molecular diagnostic testing requests for members of Harvard Pilgrim Health Care Commercial and Tufts Health Public Plans are managed by AIM Specialty Health® (AIM). Ordering providers may submit authorization review requests online 24/7 at www.providerportal.com or by phone by calling AIM Specialty Health toll-free at: 833-342-1255 (Mon.– Fri., 8 a.m.– 5 p.m. EST). Clinical coverage criteria below applies to Harvard Pilgrim Health Plan and Tufts Health Plan products as listed above.

Clinical Guideline Coverage Criteria

FoundationOne CDx or FoundationOne Liquid CDx may be authorized when ALL of the following criteria are met:

- 1. The Member has either recurrent, relapsed, refractory, metastatic, or any stage III or stage IV cancer; and
- 2. The Member has decided to seek further cancer treatment

Limitations

 The Plan will not cover both FoundationOne CDx and FoundationOne LiquidCDx in the same member for the same primary cancer diagnosis

Codes

The following code(s) require prior authorization:

Table 1: CPT/HCPCS Codes

Code	Description
0037U	Targeted genomic sequence analysis, solid organ neoplasm, DNA analysis of 324 genes, interrogation for sequence variants, gene copy number amplifications, gene rearrangements, microsatellite instability and tumor mutational burden
0239U	Targeted genomic sequence analysis panel, solid organ neoplasm, cell-free DNA, analysis of 311 or more genes, interrogation for sequence variants, including substitutions, insertions, deletions, select rearrangements, and copy number variations

The following ICD10-CM codes are covered when Clinical Coverage Criteria are met:

Covered Codes for 0037U

Covered Codes for 0239U

References:

- 1. US Food and Drug Administration. FDA List of Cleared or Approved Companion Diagnostic Devices. Accessed October 2, 2022. https://www.fda.gov/medical-devices/vitro-diagnostics/list-cleared-or-approved-companion-diagnostic-devices-vitro-and-imaging-tools
- 2. Ribeiro TB, Ribeiro A, Rodrigues LO, et al. U.S. Food and Drug Administration anticancer drug approval trends from 2016 to 2018 for lung, colorectal, breast, and prostate cancer. Int J Technol Assess Health Care. 2020; 36(1):20-8. doi: 10.1017/S0266462319000813
- 3. Chakravarty D, Johnson A, Sklar J, et al. Somatic Genomic Testing in Patients With Metastatic or Advanced Cancer: ASCO Provisional Clinical Opinion [published correction appears in J Clin Oncol. 2022 Jun 20;40(18):2068]. J Clin Oncol. 2022;40(11):1231-1258. doi:10.1200/JCO.21.02767
- Centers for Medicare & Medicaid Services (CMS). Local Coverage Determination (LCD): MolDX: Next-Generation Sequencing for Solid Tumors (L38045). 2021. https://www.cms.gov/medicare-coveragedatabase/view/lcd.aspx?lcdld=38045&ver=14
- 5. Centers for Medicare & Medicaid Services (CMS). Local Coverage Article: Billing and Coding: MolDX: Targeted and Comprehensive Genomic Profile Next-Generation Sequencing Testing in Cancer (A54795). 2022 https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleid=54795&ver=39&
- Rankin A, Klempner SJ, Erlich R, et al. Broad Detection of Alterations Predicted to Confer Lack of Benefit From EGFR Antibodies or Sensitivity to Targeted Therapy in Advanced Colorectal Cancer. Oncologist. 2016;21(11):1306-1314. doi:10.1634/theoncologist.2016-0148
- 7. Reitsma M, Fox JL, Borre PV, et al. Effect of a Collaboration Between a Health Plan, Oncology Practice, and Comprehensive Genomic Profiling Company from the Payer Perspective. Journal of Managed Care & Specialty Pharmacy. 2019; 25(5): 601-611. doi:10.18553/jmcp.2019.18309
- 8. Skoulidis F, Goldberg ME, Greenawalt DM, et al. STK11/LKB1 Mutations and PD-1 Inhibitor Resistance in KRAS-Mutant Lung Adenocarcinoma. Cancer Discov. 2018;8(7):822-835. doi:10.1158/2159-8290.CD-18-0099
- 9. Powell SF, Dib EG, Bleeker JS, et al. Delivering Precision Oncology in a Community Cancer Program: Results From a Prospective Observational Study. JCO Precis Oncol. 2018;2:1-12. doi:10.1200/PO.17.00220
- 10. Olivier M, Hollstein M, Hainaut P: TP53 mutations in human cancers: Origins, consequences, and clinical use. Cold Spring Harb Perspect Biol. 2010; 2:a001008.
- 11. Cobain EF, Wu YM, Vats P, et al. Assessment of Clinical Benefit of Integrative Genomic Profiling in Advanced Solid Tumors. JAMA Oncol. 2021;7(4):525-533. doi:10.1001/jamaoncol.2020.7987
- 12. Gounder MM, Agaram NP, Trabucco SE, et al. Clinical genomic profiling in the management of patients with soft tissue and bone sarcoma. Nat Commun. 2022 Jun 15;13(1):3406. doi: 10.1038/s41467-022-30496-0. PMID: 35705558; PMCID: PMC9200814.Milbury CA, Creeden J, Yip W-K, et al. Clinical and Analytical Validation of FoundationOne®CDx, a Comprehensive Genomic Profiling Assay for Solid Tumors. PLoS ONE. 2022; 17(3): e0264138 doi:10.1371/journal.pone.0264138
- 13. Reinert T, Saad ED, Barrios CH, Bines J. Clinical Implications of ESR1 Mutations in Hormone Receptor-Positive Advanced Breast Cancer. Front Oncol. 2017 Mar 15;7:26. doi: 10.3389/fonc.2017.00026. PMID: 28361033; PMCID: PMC5350138.
- 14. National Comprehensive Cancer Network, NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines); Non-Small Cell Lung Cancer, Version 5.2022. Accessed October 2, 2022. https://www.nccn.org/professionals/physician_gls/pdf/nscl.pdf
- 15. National Comprehensive Cancer Network, NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines); Breast Cancer, Version 4.2022. Accessed October 2, 2022. https://www.nccn.org/professionals/physician_gls/pdf/breast.pdf
- 16. National Comprehensive Cancer Network, NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines); Melanoma: Cutaneous, Version 3.2022. Accessed October 2, 2022. https://www.nccn.org/professionals/physician_gls/pdf/cutaneus_melanoma.pdf
- 17. National Comprehensive Cancer Network, NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines); Uterine Neoplasms, Version 1.2022. Accessed October 2, 2022. https://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf
- 18. NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines) for Cervical Cancer V.1.2022. National Comprehensive Cancer Network, Inc; 2021. Accessed November 4, 2022. https://www.nccn.org/professionals/physician_gls/pdf/cervical.pdf

- 19. NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines) for Gastric Cancer V.2.2022. National Comprehensive Cancer Network, Inc; 2022. Accessed November 4, 2022. https://www.nccn.org/professionals/physician_gls/pdf/gastric.pdf
- 20. National Comprehensive Cancer Network, NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines); Esophageal and Esophagogastric Junction Cancers, Version 4.2022. Accessed October 2, 2022. https://www.nccn.org/professionals/physician_gls/pdf/esophageal.pdf
- 22. National Comprehensive Cancer Network, NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines); Colorectal Cancer, Version 1.2022. Accessed October 2, 2022. https://www.nccn.org/professionals/physician_gls/pdf/colon.pdf
- 23. NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines) for Pancreatic Adenocarcinoma V.1.2022. National Comprehensive Cancer Network, Inc; 2022. Accessed November 4, 2022. https://www.nccn.org/professionals/physician_gls/pdf/pancreatic.pdf
- 24. NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines) for Prostate Cancer V.1.2023. National Comprehensive Cancer Network, Inc; 2022. Accessed November 4, 2022. https://www.nccn.org/professionals/physician_gls/pdf/prostate.pdf
- 25. NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines) for Rectal Cancer V.3.2022. National Comprehensive Cancer Network, Inc; Accessed November 4, 2022. https://www.nccn.org/professionals/physician_gls/pdf/rectal.pdf
- 26. Foundation Medicine Inc. FoundationOne®CDx Technical Information. Accessed October 2, 2022. https://info.foundationmedicine.com/hubfs/FMI%20Labels/FoundationOne CDx Label Technical Info.pdf
- 27. Foundation Medicine Inc. FoundationOne Liquid®CDx Technical Information. Accessed October 2, 2022.https://info.foundationmedicine.com/hubfs/FMI%20Labels/FoundationOne_Liquid_CDx_Label_Technical_Info.pdf

Approval And Revision History

November 16, 2022: Reviewed by the Medical Policy Approval Committee (MPAC), effective January 1, 2023 Subsequent endorsements date(s) and changes made:

- December 21, 2022: Reviewed by MPAC, renewed without changes
- February 3, 2023: Effective March 1, 2023, MNG is applicable to Tufts Health Together, Tufts Health RITogether and Tufts Health Direct.
- November 16, 2023: Reviewed by MPAC, renewed without changes
- November 2023: Unify rebranded to One Care effective January 1, 2024
- November 21, 2024: Reviewed by MPAC, renewed without changes, effective January 1, 2025

Background, Product and Disclaimer Information

Medical Necessity Guidelines are developed to determine coverage for benefits and are published to provide a better understanding of the basis upon which coverage decisions are made. We make coverage decisions using these guidelines, along with the Member's benefit document, and in coordination with the Member's physician(s) on a case-by-case basis considering the individual Member's health care needs.

Medical Necessity Guidelines are developed for selected therapeutic or diagnostic services found to be safe and proven effective in a limited, defined population of patients or clinical circumstances. They include concise clinical coverage criteria based on current literature review, consultation with practicing physicians in our service area who are medical experts in the particular field, FDA and other government agency policies, and standards adopted by national accreditation organizations. We revise and update Medical Necessity Guidelines annually, or more frequently if new evidence becomes available that suggests needed revisions.

For self-insured plans, coverage may vary depending on the terms of the benefit document. If a discrepancy exists between a Medical Necessity Guideline and a self-insured Member's benefit document, the provisions of the benefit document will govern. For Tufts Health Together (Medicaid), coverage may be available beyond these guidelines for pediatric members under age 21 under the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefits of the plan in accordance with 130 CMR 450.140 and 130 CMR 447.000, and with prior authorization.

Treating providers are solely responsible for the medical advice and treatment of Members. The use of this guideline is not a guarantee of payment or a final prediction of how specific claim(s) will be adjudicated. Claims payment is subject to eligibility and benefits on the date of service, coordination of benefits, referral/authorization, utilization management guidelines when applicable, and adherence to plan policies, plan procedures, and claims editing logic.